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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,871	01/29/2004	Hiroyuki Kayano	04329.3225	2641

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EXAMINER

NGUYEN, THUAN T

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,871

Applicant(s)

KAYANO ET AL.

Examiner

THUAN T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13, 14 and 16 is/are allowed.
- 6) ☒ Claim(s) 1-3, 10-12 and 15 is/are rejected.
- 7) ☒ Claim(s) 4-9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

2. Claims 1-3, 10-12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Wright et al. (U.S. Patent No. 6,054,896).

Regarding claim 1, Wright teaches an amplifier comprising a first amplifier circuit, a circuit for outputs a second signal corresponding to a difference between the first signal and the amplified first signal, i.e., meaning the offset or compensation signal, a second amplifier circuit, a combine circuit, and a controller for supplying and controlling of a supply of a power to the first amplifier circuit and the second amplifier circuit and has a first mode to supply the power to the second amplifier circuit without supplying the power to the first amplifier circuit (Fig. 2 and col. 4/line 57-col. 5/line 9, and col. 7/lines 35-51 & col. 8/lines 20-36; and further for power up and down in col. 38/line 46 to col. 39/line 65, with power control to set up the power level for each amplifier).

As for claims 2-3, Wright teaches these features for controlling the power levels for amplifiers in accordance to the output level of the amplified signal (col. 38/line 46 to col. 39/line 65, with power control to set up the power level for each amplifier).

As for claims 10-11, Wright teaches these features for having an acquisition unit to acquire a control signal for determining an output level of the amplified signal, a supply unit

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with comparison against a threshold value, and a detection unit for detecting the output level of the amplified signal (Fig. 2, and col. 7/line 35 to col. 8/line 19 for adaptive control processing and compensation estimator circuitry 28).

As for claim 12, Wright teaches as in Fig. 2 amplifiers connected in series and the number of amplifiers is changeable (col. 3/lines 37-62 and col. 4/line 57-col. 5/line 8).

As for claim 15, Wright teaches a radio unit comprising the amplifier as cited in claim 1 with an antenna and a radio unit (Fig. 26 and col. 4/lines 8-18 for RF environments).

Allowable Subject Matter

3. Claims 4-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or suggest an amplifier as cited in claim 1 AND further including the feature of claim 4 wherein the amplified signal is selected and outputted from a group of the amplified first signal, the amplified second signal and a signal reduced a distortion component from the amplified first signal by using the amplified second signal.

5. Claims 13-14 and 16 have been allowed.

6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or suggest a feedforward amplifier comprising three operation modes as presented in claim 13. Claims 14 and 16 are allowable based on the dependency on claim 13.

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Wright et al., Chow et al., Kitamura and Takahashi (in PTO 892 attached) disclose systems related to power amplifiers and technique.

8. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to the New Central Fax number:

(571) 273-8300, (for Technology Center 2600 only)

Hand deliveries must be made to Customer Service Window,

Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (571) 272-7895.

The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Division or Art Unit 2618.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tony T. Nguyen', with a stylized flourish at the end.

TONY T. NGUYEN
PATENT EXAMINER

Tony T. Nguyen
Art Unit 2618
June 09, 2006